

Abstract of the Disclosure

A time-resolved fluorescence microscope having high spatial and time resolution. Fluorescence from a sample 26 mounted on a confocal inverted optical microscope 19 and excitation laser light are simultaneously incident on a
5 non-linear optical element 32 to produce sum-frequency light 34. Time-resolved fluorescence from the sample is measured by varying the amount of delay in an optical delay line 33.